CLAIMS

1. A method comprising:

a) providing i) a patient diagnosed with cancer, ii) a first formulation comprising methoxyamine and iii) a second formulation comprising 1,3-bis (chloroethyl) 2-nitrosourea (BCNU);

b) administering said first formulation to said patient; and

c) administering said second formulation to said patient;

wherein said methoxyamine is administered in an amount sufficient to potentiate toxicity of said BCNU.

2. The method of claim 1, wherein said methoxyamine and said BCNU are administered sequentially.

3. The method of claim 1, wherein said methoxyamine and said BCNU are administered as a formulation.

4. A formulation comprising methoxyamine and BCNU.

5. The method of claim 1, wherein said methoxyamine and said BCNU are administered orally.

6. The method of claim 1, wherein said methoxyamine and said BCNU are administered intravenously.

7. A method comprising:

a) providing i) a patient diagnosed with cancer, ii) a first formulation comprising methoxyamine and iii) a second formulation comprising an anticancer drug or agent that exerts cytotoxicity mediated by oxidative DNA damage;

b) administering said first formulation to said patient; and

c) administering said second formulation to said patient;

wherein said methoxyamine is administered in an amount sufficient to potentiate toxicity of said anticancer agent or drug.

8. The method of claim 7, wherein said anticancer drug or agent is selected from the group consisting of bleomycin and adriamycin.

9. The method of claim 7, wherein said methoxyamine and said anticancer drug or agent are administered sequentially.

10. The method of claim 7, wherein said methoxyamine and said anticancer drug or agent are administered as a formulation.

11. A method comprising:

a) providing i) a patient diagnosed with cancer, ii) a first formulation comprising methoxyamine and iii) a second formulation comprising an anticancer drug or agent selected from the group consisting of hypoxanthine, 5-FU, uracil, IUdR, bleomycin and adriamycin;

b) administering said first formulation to said patient; and

c) administering said second formulation to said patient;

wherein said methoxyamine is administered in an amount sufficient to potentiate toxicity of said anticancer drug or agent.

12. The method of claim 11, wherein said methoxyamine and said anticancer drug or agent are administered sequentially.

13. The method of claim 11, wherein said methoxyamine and said anticancer drug or agent are administered as a formulation.

14. A formulation comprising methoxyamine and an anticancer drug or agent selected from the group consisting of hypoxanthine, 5-FU, uracil, IUdR, bleomycin and adriamycin.

15. The formulation of claim 14, wherein said anticancer drug or agent is IUdR.

16. A method comprising:

a) providing i) a patient diagnosed with cancer, ii) a first formulation comprising methoxyamine and iii) a second formulation comprising iododeoxyuridine (IUdR);

b) administering said first formulation to said patient; and

c) administering said second formulation to said patient;

wherein said methoxyamine is administered in an amount sufficient to further increase the radiosensitivity of the tumor cells in said patient.

17. The method of claim 16, further comprising the step of d) treating said patient with radiation therapy.

18. The method of claim 16, wherein said methoxyamine and said IUdR are administered sequentially.

19. The method of claim 16, wherein said methoxyamine and said IUdR are administered as a formulation.